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IN THE UNITED STATES DISTRICT COURT

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SILAS CALHOUN, et al.,	)	
	)	
	)	
Plaintiffs,	)	Case No.
	)	
vs.	)	04-10480-RGS
	)	
UNITED STATES OF AMERICA, et al.,	)	
	)	
	)	
Defendants.	)	
	)	

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VIDEOTAPED DEPOSITION OF DOUGLAS M. WHITESIDE, Ph.D.  
April 6, 2007  
Seattle, Washington

Reported by:  
Connie Recob, CCR, RMR, CRR, CLR  
CCR No. 2631  
Job No. Boston 9448/Video 9500

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April 6, 2007

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1 variety of different tests and techniques that we use to  
2 understand that. Our specialty is in looking at the whole  
3 wide range of different abilities that can be affected by  
4 neurological injuries: Head injuries, strokes, dementia,  
5 learning disabilities, attention deficit disorder, you name  
6 it. If it affects the brain, that's really what our interest  
7 and specialty is in. So we give a lot of different tests.  
8 Some of them are tests that many psychologists will use like  
9 the Wechsler adult intelligence scale. Others are more  
10 specialized for neuropsychology which really get at kind of  
11 fine grained or more difficult to discern sorts of cognizant  
12 deficits that may not be readily apparent just to the casual  
13 observer. Sorry.

14 Q. Is the testing that you do designed to reveal cognitive  
15 deficits even where there are no gross neurological deficits?

16 A. Well, yeah, there's different types of deficits that can  
17 happen after brain injury. Sometimes they're quite apparent.  
18 For example, somebody might be what we call hemiparetic, in  
19 other words, an entire side of their body may be paralyzed  
20 because of, say, a stroke. That's a pretty gross obvious  
21 problem that, you know, really pretty much anybody can see.

22 But neuropsychology developed out of essentially  
23 historically the second world war and veterans coming back  
24 with head injuries who had a variety of cognitive problems  
25 that were affecting them functionally. You know, they

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1 couldn't adopt and live in the world but there wasn't these  
2 obvious problems like the hemiparesis. So over the years,  
3 over the last 40 or 50 years neuropsychology has developed a  
4 wide range of techniques that look at a variety of cognitive  
5 domains such as attention and concentration, memory, language  
6 processing, executive functioning, you know, like  
7 decision-making, problem solving, visual spacial abilities  
8 and emotional functioning.

9 And the short answer to your question is yes, we do  
10 look at and actually specialize in finding deficits that are  
11 not necessarily the gross things that you might see on a  
12 bedside neurological evaluation.

13 Q. Doctor, at my request did you evaluate Estella Calhoun to  
14 determine if she had any cognitive impairments and whether  
15 any of those impairments resulted from the brain injuries she  
16 suffered in her infancy?

17 A. Yes. You had requested that I do a thorough  
18 neuropsychological evaluation on her because you were  
19 concerned about residual cognitive and behavioral problems  
20 from this injury she had as a newborn and I did do that last  
21 year in May.

22 Q. What did you do in preparation for your report that you  
23 issued back last spring?

24 A. Yes. I reviewed a large number of medical records that you  
25 had -- that you had forwarded to me, hospital records,

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1 focused on the tasks that affected her performance. On the  
2 whole it looked like her language processing was generally  
3 pretty good. So yeah, so there were several areas where she  
4 did -- where she did just fine.

5 Q. Where did the testing indicate that there were some problems?

6 A. Well, there were two main areas that I noticed that she had  
7 difficulty. One was on several of the assessment tasks she  
8 had some trouble with concentration and attention, keeping  
9 her attention focused to tasks. This wasn't an all the time  
10 sort of problem, but it did come up from time to time.

11 Counterbalancing that, I noticed that when we provided  
12 a lot of structure for her when it was really a well  
13 structured task and kept her going with that, she could be  
14 redirected easily. She did tend to get a little bit more  
15 distractible later on in the evaluation, not terribly unusual  
16 for children, but she could be redirected as long as there  
17 was a lot of structure for her.

18 So there were some concentration problems, but she  
19 responded really well to structure. And then the other piece  
20 that I noticed that was a problem for her was in integrating  
21 visual spacial abilities, in other words, her ability to  
22 perceive visual stimuli such as a drawing and being able to  
23 integrate a motor response, in other words, a drawing task.  
24 In other words, she has to look at a fairly complex design or  
25 picture and then copy it as accurately as she can. That was

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1 really a struggle for her. She had quite a bit of difficulty  
2 with that -- with that rather complex integrative process.

3 Q. Let me understand that and if you can explain it to the  
4 Court.

5 A. Sure.

6 Q. Is she shown -- is she shown a diagram?

7 A. Yes. It's a fairly abstract line drawing, that has a lot of  
8 small parts to it so a lot of little details, and the child  
9 or adult is asked to copy this as closely as they can. And  
10 like all of our tests, we have norms. So in other words,  
11 we're able to compare her performance with other children of  
12 her age and kind of get a sense of what would be typical, you  
13 know, in terms of her ability because obviously a  
14 six-year-old is not going to do the same as a 12-year-old who  
15 is not going to do the same as a 25-year-old. So I'm able to  
16 compare how well she can do with other -- with other  
17 six-year-olds, and what I noticed was she had a lot of  
18 difficulty on this. In fact, she was in what we call the  
19 mildly impaired range at about the fifth percentile, so she  
20 struggled quite a bit with this task.

21 Q. When you say fifth percentile, that means that 95 percent of  
22 the people who would be shown and asked to perform this task  
23 would perform it better than she would?

24 MR. GIEDT: Objection; leading.

25 THE WITNESS: Okay.

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1 terms of copying the same thing with her hand, okay.

2 So that ability to imitate hand positions also gave her  
3 a lot of difficulty so we have two different types of tasks  
4 requiring two different types of responses but with the same  
5 underlying cognitive ability. That was really where her  
6 challenge was and that was kind of the common underlying  
7 deficit that she had on the evaluation in this domain.

8 Q. In terms of that deficit, how does that translate into the  
9 child's functioning, Estella's functioning on a day-to-day  
10 basis in various domains?

11 A. Well, children who have these sorts of difficulties in terms  
12 of accurately perceiving and integrating visual information  
13 can have a variety of different problems. One common problem  
14 that I see is with, like mathematics for example, children  
15 with visual spacial or visual motor problems often will have  
16 difficulty doing math because if you think about it, math is  
17 a very visual sort of ability. You know, everything from,  
18 you know, lining up numbers to more complex things such as,  
19 you know, geometry, trigonometry. You know, in all the  
20 different levels of learning math it's really a very spacial  
21 skill that we have. So if somebody is having trouble with  
22 those kind of visual spacial abilities, it often times will  
23 lead to trouble with mathematics. So when I do like a  
24 learning disability evaluation, I often -- and I find math  
25 disabilities I will often look for these sorts of visual

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1 spacial problems to see if that's what's causing it and many  
2 times it is.

3 Another common problem is the ability to pick up like  
4 social cues, being able to accurately perceive and understand  
5 kind of social interaction. So it can be difficult in people  
6 who have these sorts of problems to be able to kind of  
7 process, understand, integrate subtle complex social cues,  
8 which if you think about it are quite visual in nature. So  
9 those are some of the problems that potentially could come  
10 up.

11 There's other problems, for example, with reading. If  
12 children are misperceiving, you know, the structure of  
13 letters, you know, it's going to be more difficult to read.  
14 Commonly in, you know, dyslexia, which is a reading learning  
15 disability, there are children who have that sort of problem  
16 where it's really a visual processing problem. There are  
17 other children who have it as more of an auditory processing  
18 problem, but that's another area that children could be at  
19 quite a bit of risk when they have these sorts of visual  
20 processing problems.

21 Q. Were there any other areas of concern or any other particular  
22 tests which struck you as significant?

23 A. The -- I should say something about, you know, some of the  
24 other tests like, for example, that the parents completed.  
25 The parents noted some, like, somatic complaints: Nausea,

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1 so, you know, that discrepancy between the verbal IQ and the  
2 performance IQ is consistent with the sorts of difficulties  
3 that I had picked up on here with this evaluation.

4 I should say that with this testing that I did, the IQ  
5 scores didn't pick up this deficit as much as the more  
6 specialized neuropsychological test picked it up. That's  
7 also not unusual. Like I said, neuropsychological tests are  
8 designed to get at more of these fine grained difficulties.  
9 IQ scores they're great, but they're really kind of just a  
10 big picture sort of thing and they do vary quite a bit.  
11 That's why we do the more specialized testing. But I would  
12 say as a bottom line, yes, this result is consistent with the  
13 school results from 2003 and I think the school was picking  
14 up the same things that I picked up here.

15 Q. Do you have an opinion to a reasonable degree of certainty as  
16 to whether the cognitive deficit in visual motor functioning,  
17 the visual deficits that you've picked up is likely to have  
18 an affect on Estella's academic functioning?

19 A. Yes, I do. So you're asking about -- let me just make sure I  
20 understand what you're asking. Are you asking would the  
21 cognitive deficits that I observed have an impact or an  
22 adverse impact on her academic functioning down the road? I  
23 just want to make sure I'm understanding your question.

24 Q. Both currently and down the road.

25 A. Okay. Yes. I would say that to a reasonable degree of

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1 p.m. and we're going to go off the record. Thank you.

2 (Recess 1:45-1:46.)

3 THE VIDEOGRAPHER: The time is now -- the  
4 time is now 1:46 and we're back on record. Thank you.

5  
6 EXAMINATION (Continuing)

7 BY MR. APPEL:

8 Q. Dr. Whiteside, I'm sorry. As you're probably aware we just  
9 had a technical glitch and Attorney Giedt and I here could  
10 not hear your last answer. I wonder if we can just repeat  
11 that.

12 A. Yeah, as I understand it it did get on the record but you  
13 guys obviously didn't hear it. Basically what I said -- and  
14 I don't know how much of my answer you caught and didn't  
15 catch. But bottom line I was discussing the STAR math report  
16 and indicated that the results of this report found that she  
17 was at the fifth percentile in math and was at a 0.4 grade  
18 equivalent which means that she was at approximately the  
19 fourth month of her kindergarten year in terms of her  
20 equivalence on math and she was actually physically at the  
21 time of this report in about the sixth month of her first  
22 grade year. So she's over a year behind in mathematics.

23 The other interesting piece is that in terms of just  
24 her grade equivalent she hasn't really changed significantly  
25 since I evaluated her last year which is quite concerning.

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1 So she comes out at the fifth percentile and that's, once  
2 again, in that mildly impaired range as I conceptualize it,  
3 and this result is very consistent with the underlying  
4 cognitive deficits that I found in the evaluation last year.

5 Q. Do you have an opinion to a reasonable degree of  
6 psychological certainty as to whether or not her cognitive  
7 impairments are actually affecting her academic functioning  
8 in math at the present time?

9 A. I -- I would say that once again on a more-probable-than-not  
10 basis that yes, it is. Students oftentimes, as I indicated  
11 earlier, will have problems with areas like mathematics if  
12 they have difficulty with visual processing abilities which  
13 the assessment results clearly indicated that she did. So  
14 this is a common pattern that I see in a lot of children with  
15 these types of problems and mathematics seems to be a  
16 particularly vulnerable area for children. So yes.

17 Q. Now, in terms of her future functioning, what is the  
18 prognosis?

19 A. Well, I would say that given the evidence -- I'm sorry.

20 MR. APPEL: You can go on.

21 THE REPORTER: I didn't hear your  
22 objection at all.

23 MR. GIETD: My objection was that he's  
24 opining on an area that was not included within the content  
25 of his report in terms of prognosis. So I'm objecting and

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1 moving to strike the testimony, but since we're in a video  
2 deposition you can go on.

3 Q. (BY MR. APPEL) You can continue, Dr. Whiteside.

4 A. Well, based on the new evidence here we're clearly seeing a  
5 pattern of problems with math and the startling piece of  
6 evidence is that she's really not progressing in mathematics  
7 over the course of a year which really is quite concerning to  
8 me. And I would say that this is probably -- if I had to  
9 rank order them, this would be the greatest area of concern  
10 that I have for Estella for the future given the particular  
11 types of deficits that she has and this additional data  
12 because we're clearly seeing a problem unfolding.

13 This is not unusual in children because, you know,  
14 children develop and progress quite a bit during these years.  
15 So problems that may not be quite as evident at one point in  
16 time become clearer as you get a longer baseline. So at time  
17 one, which say was when I saw her, you know, she was  
18 essentially in kindergarten so there's not a lot of variance,  
19 not a lot of variability in what kids do so she came out  
20 fairly typical. But now we have time from that point to this  
21 point, almost a year, where we're seeing her progression kind  
22 of going like this (indicating) not really doing much whereas  
23 other children are going like this (indicating.) So whereas  
24 last year she was here (indicating) where most children are  
25 over time this split is getting wider and wider.

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1 And for example when you have like a learning  
2 disability in math, this pattern is not uncommon and if  
3 children don't have interventions, don't have treatment,  
4 quote, unquote, accommodation, special education programs,  
5 this pattern becomes more and more evident. Even with  
6 interventions it can be -- still be a problem. So I see that  
7 as once again a common pattern, happens all the time with  
8 children. And this is probably an area of very significant  
9 need that, you know, the professionals need to help her with.

10 Other areas of risk are essentially the things that I  
11 talked about before. You know, I'm concerned about her  
12 social development. If she's having trouble with visual  
13 processing, picking up on visual cues, you know, she's at  
14 risk for developing problems in that area and there's the  
15 potential for risk in terms of abilities like reading that  
16 may not be as evident at this point but may become more  
17 evident as the reading material gets more and more complex.  
18 So I would say she's at least at risk for problems in those  
19 areas as well as the math.

20 Q. Do these problems become more manifest or more clearer as the  
21 child gets older and has to respond to more complex  
22 information and challenges?

23 A. Yes, that's -- that's very common. I'm sorry. I didn't hear  
24 that.

25 Q. You may continue your answer.

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1 Estella.

2 The behavioral issues that Dr. Elwyn noted are many  
3 times in many children founded on these sorts of cognitive  
4 issues, particularly the attention concentration. So in that  
5 respect I'm saying that my -- the neurocognitive disorder --  
6 sorry, I can't talk today -- deficits that I found today are  
7 consistent with a child who manifests attention deficit  
8 disorder. You do see these types of problems in children  
9 with that sort of disorder, yes.

10 Q. Do you have an opinion to a reasonable degree of  
11 psychological certainty as to whether the brain injuries that  
12 Estella suffered as an infant are a significant contributing  
13 factor in her -- the development of her cognitive deficits?

14 A. Can you rephrase that? I just wasn't quite sure. I want to  
15 just make sure I really understand your question.

16 Q. Yeah. Do you have -- do you have an opinion to a reasonable  
17 degree of certainty as to whether or not her early brain  
18 injuries are a substantial contributing factor in the  
19 development of these cognitive deficits?

20 A. Oh, okay. Yes, I do have an opinion about that. It's my  
21 opinion that -- once again to a reasonable degree of  
22 psychological certainty -- the early neurological injuries  
23 account for, are consistent with the neurocognitive deficits  
24 that I noted at this time. In particular, there's evidence  
25 that she had hemorrhages affecting parts of the right

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1 cerebral hemisphere. There's an extensive body of research  
2 literature that demonstrates that these sorts of lesions  
3 whether it's called by a hemorrhage or an infarct or a  
4 seizure or whatever in the right cerebral hemisphere do cause  
5 various problems with processing visual information, and  
6 that's exactly the pattern we saw with Estella here.

7 As I said, a couple good things is that on the big  
8 scheme of things she's in the mildly impaired range not the  
9 severely impaired range, but that doesn't mean that she's  
10 functioning as a typical six-year-old. You know, she's  
11 clearly having much more difficulty than that.

12 So it's always in many cases like this a good news/bad  
13 news thing. The good news is that there's things that  
14 everybody with cork with. She's not so impaired that, you  
15 know, she's hemiparetic. She's not so impaired that she will  
16 never be able to succeed. But she's impaired enough that  
17 she's going to need extra help, extra assistance, and that  
18 ties back to in my opinion the underlying neurological  
19 injuries that she had.

20 Q. What recommendations would you make, Dr. Elwyn, (sic) to give  
21 her the kind of assistance to give her the best chance  
22 academically?

23 A. I believe you might have just called me Dr. Elwyn.

24 Q. Oh, I'm sorry. I'm sorry, Dr. Whiteside. Lots of doctors.  
25 I'm sorry.

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